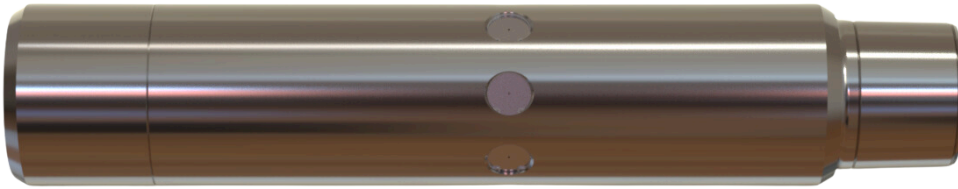


RAPTOR™

CLOSABLE TOE INITIATION SLEEVE



OVERVIEW

Interra Energy's Raptor™ Closeable Toe Initiation Sleeve is primarily utilized in conjunction with Interra's Raptor OC (Open-Close) Coil Sleeve Multistage System. The Raptor Closeable Sleeve is run into the toe of a well and is pressure activated. The additional flow into the formation assists the operator in getting the Velocity™ Shifting Tool to bottom in long reach applications.

OPERATION

The Raptor Closeable Sleeve is installed in the casing string near the toe of the well. The unique design prevents premature shifting of the sleeve with wiper plugs or coiled tubing tools.

To activate the sleeve, pressure is increased in the well to the predetermined activation pressure. Flow can then be initiated into the formation. When desired, the operator can run in hole with the Velocity Shifting Tool to close the Raptor Closeable Sleeve with a simple up-to-close operation.

SPECIFICATIONS

Raptor Closable Toe Sleeve						
OD in / mm	Weight		OD		Sleeve ID	
	lb/ft	kg/m	in	mm	in	mm
4.5 / 114.3	11.6	17.26	5.500	139.70	4.000	101.60

FEATURES & BENEFITS

- Shift up to close design.
- Compatible with industry wiper plugs.
- Customizable opening pressures in 500 psi (3.5 MPa) increments.
- Differential design.
- Entire wellbore is isolated post-frac without the need to run plugs.
- Short design eliminates the need for pup joints.
- Frac through capability.
- Fully mechanical shifting, allowing the use of slim shifting BHAs in the event of casing deformation issues.